

4. SERRANUS LABRIFORMIS. *Jen.*

PLATE III.

S. fusco-flavo, nigro, alboque variatus; dorsali rubro-marginatâ; spinis fortibus, subæqualibus, ad apices laciniis membranaceis investitis; dentibus aculeiformibus,* valdè retroflexis, seriebus internis majoribus; caninis, in maxillâ superiore duobus, in inferiore quatuor, mediocribus; preoperculo margine arcuato, vix denticulato; operculo mucrone unico plano, modico, armato; squamis infra lineam lateralem ciliatis, supra et in ventre lævibus.*

B. 7; D. 11/17; A. 3/8; C. 15, &c.; P. 18; V. 1/5.

LONG. unc. 17.

FORM.—Oblong-oval, with very much the aspect of a *Labrus*. The greatest depth, which is beneath the commencement of the dorsal, is rather less than one-fourth of the entire length. The head is large, and nearly one-third of the same. The profile, from the dorsal to the end of the snout, curves gradually downwards in one continuous bend. The lower jaw projects a little beyond the upper. The teeth form a broadish band of fine card in both jaws, with the inner rows longer and more curved than the outer; in the upper jaw, a little behind the anterior extremity, are three or four longer than the others, and curving so much backwards as almost to be laid flat; at the posterior part of this jaw on each side they pass into velutine. The canines are strong, but not very long; in number two above and four below, not exactly in front, but a little on each side of the middle. The teeth on the vomer and palatines are velutine. The eyes are moderately large, high in the cheeks, equidistant from the upper angle of the preopercle and the end of the snout, with a diameter rather less than one-sixth the length of the head: the distance between them about equals their diameter. The margin of the suborbital is entire, but a little sinuous. The maxillary is large, and cut nearly square at its posterior extremity: it is nearly all exposed, and reaches to beneath the posterior part of the orbit. The nostrils are a little in advance of the eyes, and consist of two round openings, one before the other, the posterior one being the largest. The whole head, including the lower jaw, is covered with small scales, which become more minute towards the extremity of the snout, but are very visible even there: there are none, however, apparent on the maxillary. The preopercle has the basal angle rounded, and the ascending margin a little convex outwards, and denticulated, but the denticles are minute and not very obvious. The opercle and subopercle together (the line of separation between which is scarcely apparent) form a triangle. The former terminates posteriorly in one flat spine, moderately developed, not reaching to the extremity of the membranous angle by twice its own length. The lateral line, which is rather indistinct, is nearly parallel to the back at a little below one-fourth of the depth. The scales on the body below

* I have employed this term to designate the slender curved teeth, arranged in several rows, which Cuvier calls *en cardes*, or, when less numerous and rather more developed, *en crochets*. They much resemble the prickles found on some plants.

the lateral line are rough, but those above it, as well as those on the belly, nearly smooth: one taken from the middle of the side is of an oblong form, rounded at the free extremity, which is finely dotted and ciliated; its whole surface finely striated, with nine or ten deeper striæ at the base. The pectorals are attached low down, rounded at the extremity, and about half the length of the head. The dorsal commences immediately above them, and is tolerably even throughout its course, extending nearly to the caudal. The membrane is rather deeply notched between the spines, which are very stout and invested at their tips with membraneous tags, as in the *Labridæ*. The first spine is only half the length of the second and third; the fourth is a little the longest, equalling two-fifths of the depth of the body; the fifth and succeeding ones decrease very gradually to the tenth, which is rather more than half the length of the fourth; the eleventh is a little longer, and is followed by the soft rays, the longest of which is about equal to the longest of the spinous. The anal commences about in a line with the second soft ray in the dorsal, and terminates before that fin, leaving double the distance between it and the caudal; first spine not half the length of the second and third, which are about equal, and much stouter; soft portion of the fin of a rounded form, with the middle rays nearly double the length of the second and third spines. Caudal even, or very slightly rounded, without any rows of scales between the rays. Ventrals a little shorter than the pectorals, immediately beneath them, pointed.

COLOUR.—“Mottled with brown-yellow, black and white: upper and lower edges of the caudal, edges of the dorsal and anal, ‘arterial’ and purplish red.”—D.

Habitat, Galapagos Archipelago.

Obtained off Chatham Island in the Galapagos Archipelago. There can be little doubt of its being an undescribed species, well characterized by its *labriform* appearance, as regards the fins, rounded and nearly entire margin of the preopercle, and scales smooth *above*, but rough *beneath* the lateral line.

5. SERRANUS OLFA. *Jen.*

PLATE IV.

S. fusco-variatus; spinis dorsalibus ad apices laciniis investitis; naribus orbiculatis, aperturâ unica magnâ, duas minores includenti; dentibus aculeiformibus, retroflexis, seriebus paucis; caninis, in maxillâ superiore duobus, in inferiore quatuor, cæteris vix fortioribus; preoperculo margine adscendenti prope recto, versum angulum paulum sinuato, vix denticulato; operculo mucronibus duobus, parvis, subæqualibus, armato; squamis ubique lævibus.

B. 7; D. 11/18; A. 3/11; C. 17, &c.; P. 17; V. 1/5.

LONG. unc. 23½.

FORM.—Rather elongated, with the dorsal and ventral lines equally curved, and neither departing much from a straight line. Depth, in the region of the pectorals, equalling rather more than one-

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